

addresses are provided to group members in a communication group, and that voice packets are “addressed” voice packets. Therefore, the rejected claims recite features clearly specify packet mode communication and addressed voice packets, thereby distinguishing the claimed invention from Sigler.

**SIGLER FAILS TO TEACH OR SUGGEST THE CLAIMED  
PACKET MODE GROUP COMMUNICATION**

In response to Applicants’ previous argument that Sigler fails to teach or suggest packet mode group communication or the operation of the claimed group server, the Office Action asserted that “vo-coded voice over transmission frames is interpreted as packets”. However, such an assertion is contrary to the common terminology in the art of data communication and the teachings of Sigler.

As clearly illustrated in Figures 33 and 34 (b), for example, Sigler uses the term “frame” to refer to a TDMA frame, which is a sequence of a continuous bit stream, i.e., conventional transmission frames used in TDMA data transmission. Thus, Sigler’s voice frames are merely frames containing vo-coded bits, and Sigler merely teaches a conventional vo-coded voice communication in transmission frames over circuit-switched networks.

As a result, Sigler’s voice frames have nothing to do with data packets or packet mode communication, which refers to a mode of data communication in which packet switching is used rather than circuit switching. Packet switching refers to a process of routing and transferring data in the form of an addressed packet, so that a channel is only occupied during the transmission of the packet. To that end, the packet contains all the address information required for routing and transferring. That configuration is fundamentally different from Sigler’s conventional frame transmission. Thus, Sigler fails to teach or suggest a packet mode group voice communication.

The Office Action asserted that Sigler’s LAN/WLAN uses packets to communicate with the Network Operations Center (NOC) (as allegedly disclosed at column 3, line 2); however, that portion of Sigler merely describes background art and general architecture of a satellite system without any teaching or suggestion that voice communication would be “packet mode voice” communication. The Office Action also asserted that column 44 and column 49 teach IP/TCP/IP; however, that passage merely provides a glossary of terms and has no relation to the voice communication actually described in Sigler’s specification.

The Office Action also asserted that Sigler’s column 2, lines 10-15, allegedly teaches packet-switched data transfer which could be used for Voice over IP packets over a public

switched packet network. However, that passage of Sigler merely teaches a mobile data service, which provides a packet switched connection between a Data Terminal Equipment (DTE) device at a mobile terminal and a Data Communications Equipment (DCE) device at a mobile terminal, wherein the mobile data supports also integrated voice/data operation. However, Sigler fails to teach or suggest packet switched communication as a solution for providing group communication. To the contrary, Sigler teaches the TDM frame transmission approach as illustrated in Figure 33.

The Office Action also asserted that the call monitoring procedure described in column 22, line 50 to column 23, line 22 provides for call monitoring of packets over an FES-C and conditions for timeout for non-receipt of voice packets. However, Sigler's Mobile Earth Terminal (MET) monitors whether a received subframe is a voice subframe or a message subframe. Thus, this description also merely relates to TDM frame transmission rather than packet mode communication.

#### SIGLER FAILS TO TEACH OR SUGGEST THE CLAIMED GROUP SERVER ON TOP OF A COMMUNICATION SYSTEM

The Office Action has re-asserted that Sigler discloses a group server on top of a communication system and a group server providing individual addresses to group members, and sending/forwarding voice messages (see Office Action, paragraphs 56-63). However, as explained previously, the NOC merely provides an interface between satellite network system and satellites. Additionally, a Group Controller (GC) is merely a resource controller that allocates and de-allocates circuits for the calls. Thus, the GC is not a network node or a server through which the voice communication is routed. Rather, the GC is only a controlling network element, not a party in the voice communication. This can be readily seen from Figures 28 and 34 (a), and Figure 44B, for example. The circuit switched channel is established between the mobile terminal and the Feeder link Earth Station (FES). The GC only provides a channel assignment command. Thus, the NOC and the GC are not on top of the communication system; rather, the NOC and GC are merely elementary parts of the communication system.

As a result, the NOC and the GC do not to provide the functionality of the group server according to the claimed invention. Rather the NOC and the GC are merely control elements for setting up a group call and assigning the circuit switched channel. Contrary to the assertions of the Office Action, no PTT message is sent from the mobile terminal to the

NOC; rather, a channel request in a signalling message is sent to the GC. The PTT signalling unit (PTT-SU) is actually sent to the FES.

Although the Office Action asserted that the NOC and the GC provide management of streams addressed to a user active in user group, that characterization is erroneous. Rather, the NOC and the GC are not user-specific servers; they are general control elements in Sigler's system. Further, NOC and the GC do not receive any voice packet streams or forward one of the voice packet streams at a time to the respective user based on the continuity of the voice packet streams. Rather, in Sigler, neither the NOC nor the GC receive any voice communication or forward any voice communication; all voice communication is performed on the circuit switched channel via the FES.

Further, in Sigler, no voice packets addressed to a communication group are sent from a group member to the group server, or forwarded individually to each receiving one of the group members on the basis of individual addresses of the group members. As discussed above, the GC is not involved with the actual voice communication but only assigns the circuit switched channel.

#### SIGLER FAILS TO TEACH OR SUGGEST CLAIMED INDIVIDUAL LOGICAL CONNECTIONS

The Office Action also asserted that Sigler teach starting a speech item in group by sending a leader packet via the individual logical connection by means of outband signalling. (see, Office Action, paragraph 64). However, the Office Action appears to have misread claim 3. Claim 3 recites that outband signalling is used for creating an individual logical connection from each group member to the group server not that outband signalling is used for sending a leader packet. In fact, there are no logical connections between Sigler's group controller and group members. Although the Office Action asserted that each mobile terminal must necessarily have a logical connection to the group server, this is not the case. Rather, in Sigler, a circuit switched connection is established between the group members and the FES, and all communication between the group members is performed through the circuit switched connection.

Although the Office Action has attempted to assert that a logical or virtual connection between each mobile the group server in a packet switch network is not recited in rejected claims, the claims recite packet mode group voice communication using address packets, for reasons explained above. Moreover, claim 3 recites that the leader packet is sent to the group

server over the respective individual logical connection. Sigler fails to teach or suggest that feature.

SIGLER FAILS TO TEACH OR SUGGEST CLAIMED  
FILTERING OF VOICE PACKET STREAMS

The Office Action asserted that the claims fail to require filtering voice packet streams related to two or more groups or one-to one communications with one user. (see, Office Action, paragraph 81). However, claim 8 clearly recites that the user specific server firstly receives a first voice packet stream related to a first group or one-to-one communication and forwards the first voice packet stream to the respective user. Claim 8 also recites that the user specific server monitors the continuity of the first voice packet stream. Claim 8 still further recites that a user specific server receives at least one further voice packet stream related to at least one further group or one-to-one communication, and does not forward (i.e., filters off) the at least one further voice packet stream to the user if the first voice packet data stream is continuous. Therefore, the claim 8 effectively filter voice packet streams related to two or more groups or one-to-one communications with one user.

CONCLUSION

Accordingly, Applicants submit that claims 1-48 are allowable over Sigler. Therefore, Applicants look forward to receiving a Notice of Allowance indicating the allowability of the pending claims. However, if anything further is necessary to place the application in condition for allowance, Applicants request that the Examiner telephone Applicants' undersigned representative.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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